US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: **14 April 2005**
Comment Deadline: **13 May 2005**
Corps Action ID #: **200530965**

All interested parties are herby advised that the Wilmington District, Corps of Engineers (Corps) has received an application for work within jurisdictional waters of the United States. Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: R&L MacLeod Investments
P.O. Box 320
Denver, NC 28134

AGENT (if applicable): Wetland & Natural Resource Consultants, Inc.
217 Paragon Parkway, #142
Clyde, NC 28721

Authority

The Corps will evaluate this application and a decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures under Section 404 of the Clean Water Act (33 USC 1344).

Location

The site is located on the east side of Buffalo Shoals Road (SR 1003), approximately 2 miles north of its intersection with NC Hwy 16, southeast of Newton, Catawba County, North Carolina (35.6234445°N -81.0877766°W). The site contains tributaries of the North Fork Mountain Creek, which flows into the Catawba River. The Catawba River ultimately enters the Atlantic Ocean through the Santee-Cooper River system in South Carolina.

Existing Site Conditions

The property is approximately 123 acres in size and consists of wooded and open pastureland. The site contains headwater tributaries and adjacent wetlands. The stream channels and wetlands are adjacent to the North Fork Mountain Creek, which is located in the Upper Catawba River Basin (HUC 39 03050101). The main stream channel running the length of the property was determined to be a perennial headwater stream with varying degrees of quality. A portion of this channel (approximately 750 linear feet) has been impacted to due ongoing cattle access and lack

of riparian buffer. This section was considered of poor quality due to the lack of aquatic habitat/life, presence of bank erosion, lack of sinuosity, and lack of riparian buffer. The upper reach and lower reach of the main stream channel (approximately 1,350 linear feet) was determined to be of good quality based upon the presence of a riparian buffer, presence of aquatic habitat/life, and presence of adjacent wetlands. There are two small tributaries (Stream D and E) to the main channel that are approximately 198 linear feet and 294 linear feet. Stream D was determined to be of poor quality due to its short length, lack of aquatic habitat/life, and lack of riparian buffer. Stream E was determined to be of fair quality due to the presence of aquatic habitat, moderate sinuosity, riparian buffer and its relatively short length.

Several wetland areas are located along the main channel. Wetland E is where the main stream channel originates and is approximately 0.74 acres in size. Wetland E is considered a headwater wetland and contains the following vegetation: Red Maple (*Acer rubrum*), Holly (*Ilex opaca*), Sweetgum (*Liquidambar styraciflua*), Black Gum (*Nyssa sylvatica*), Possum-Haw (*Viburnum nudum*), Silky dogwood (*Cornus amomum*), Spicebush (*Lindera benzoin*), Netted Chain-Fern (*Woodwardia areolata*), Cardinal Flower (*Lobelia cardinalis*), Microstegium (*Eulalia viminea*), Jewelweed (*Impatiens capensis*), and Cinnamon Fern (*Osmunda cinnomomea*). The main source of hydrology in this area is groundwater with supplemented overland flow during rain events. This area has been relatively undisturbed and is considered of good quality. Wetland B is located in the pasture immediately adjacent to the main stream channel. This area is approximately 0.37 acres in size and is largely dominated by the following herbaceous vegetation: Juncus (*Juncus effusus*), False-Nettle (*Boehmaria cylindrical*), and Microstegium (*Eulalia viminea*). The dominant source of hydrology in this area is groundwater and overbank flooding from the main stream channel. This area has been disturbed due to on-going cattle access and is considered of poor quality. Wetland A is located near the southern boundary of the property adjacent to the lower reach of the main stream channel. This area is approximately 0.79 acres in size and has had some minor disturbance due to cattle access. Vegetation composition is similar to that of Wetland E. Dominant sources of hydrology for this area are a combination of groundwater, overbank flooding, and overland flow. This area was determined to be of good quality.

Applicant's Stated Purpose

The purpose of this project is to construct a 20-acre recreational and water skiing lake with an associated residential subdivision. The lake is considered a central amenity to the subdivision and will provide practice opportunities for competitive water skiers.

Project Description

The applicant is proposing to construct a dam on an unnamed tributary to North Fork Mountain Creek in order to construct an open water lake. The dam will be approximately 50 feet tall with a 25-foot wide crest at 3.5:1 side slopes. The trapezoidal base of the dam will be approximately 550 feet wide. The outlet structure of the lake will utilize a low-flow cool water design. Approximately 5,632 cubic yards of fill will be used to construct the dam. The applicant is proposing to fill approximately 714 linear feet of the main stream channel in order to construct the dam (Figure 6). The applicant is also proposing to excavate and flood approximately 2, 270 linear feet of the main stream channel upstream of the dam. Total proposed impacts to stream

channels associated with this project are 2,984 linear feet. The applicant is proposing to fill all of Wetland A (0.79 acres) in order to construct the dam (Figures 8 and 9). The applicant is also proposing to excavate and flood approximately 1.25 acres of wetland upstream of the dam. Total proposed wetland impacts associated with this project are 2.04 acres. The applicant is also proposing to construct an access road to residential lots located on the east side of North Fork Mountain Creek (Figure 5). The applicant is proposing to construct the road crossing with a bridge or bottomless arch culvert and does not anticipate any impacts to North Fork Mountain Creek.

The applicant is proposing to mitigate for stream channel impacts by preserving 2,300 linear feet of on-site stream channels (see Figures 10 and 12) and potentially restoring approximately 2,500 linear feet of off-site stream channels. The applicant will preserve a 50-foot vegetated riparian buffer on both sides of stream channels B and C, which total approximately 1,410 linear feet of stream channel. A 50-foot vegetated riparian buffer will remain along the south side of Stream, A which totals approximately 735 linear feet. Stream A is the property line therefore no buffer preservation is proposed on the north side of the stream. The applicant is proposing to mitigate for wetland impacts through the creation of 3 acres of littoral wetlands around the shoreline of the lake (Figure 11). The applicant is currently researching potential stream and wetland restoration opportunities on a golf course at the Catawba Country Club in Newton, Catawba County, North Carolina (35.6549383°N –81.3050312°W), which will be subject to Corps review and approval. The potential mitigation site is located within the same hydrologic cataloging unit as the impact site. The applicant is investigating the potential to restore 2,500 linear feet of stream channel and 2 acres of wetlands at this site (Figures 13 and 14).

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Ms Cyndi Karoly (all other projects) by May 13, 2005.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and has determined that registered properties, or properties listed as being eligible for inclusion therein are located within the project area and/or may be affected by the proposed work. By copy of this Public Notice, the Corps is requesting comments from the North Carolina State Historic Preservation Office to determine the type of effects if any.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. A final determination on the effects of the proposed project will be made upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service."

Evaluation

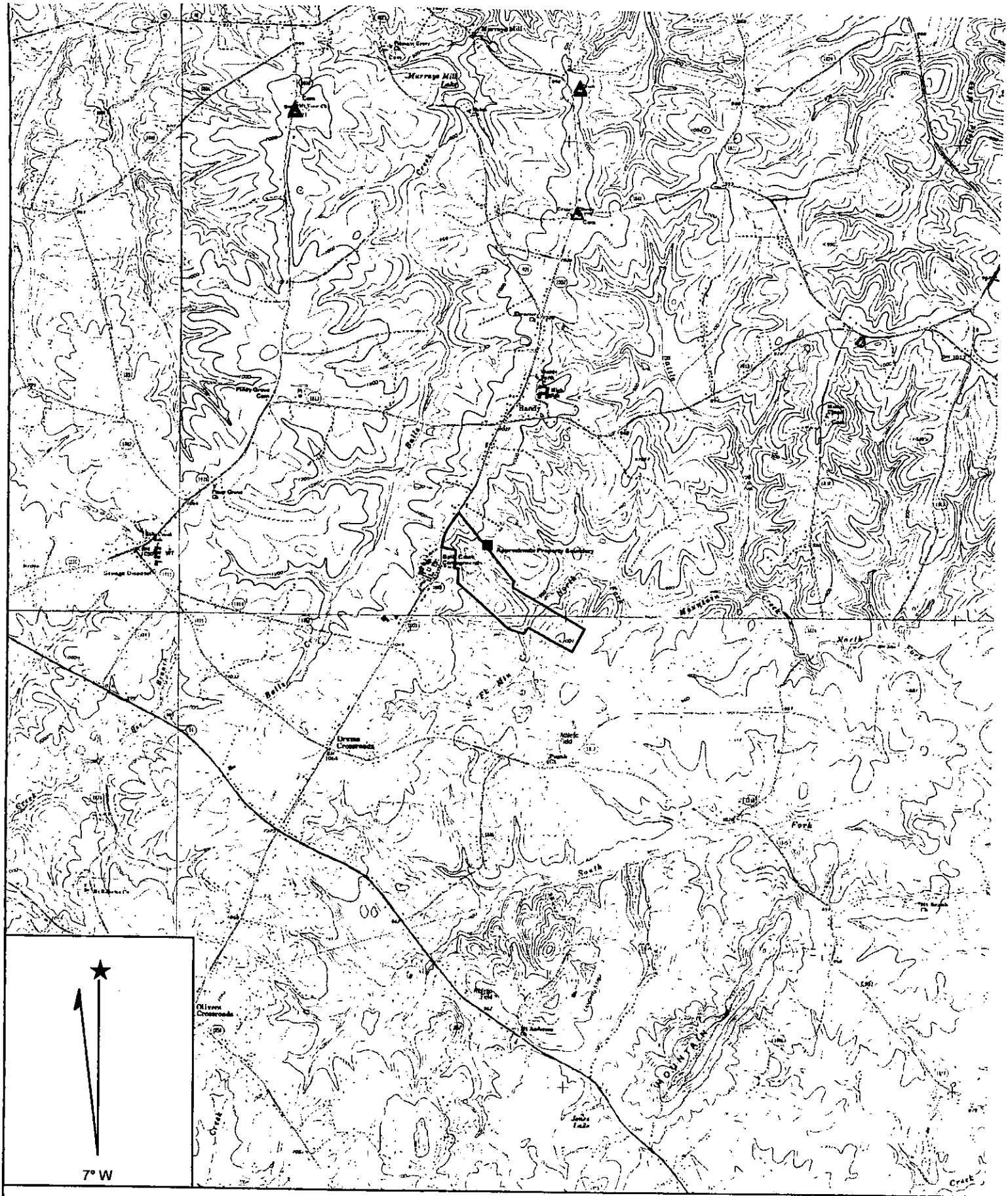
The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

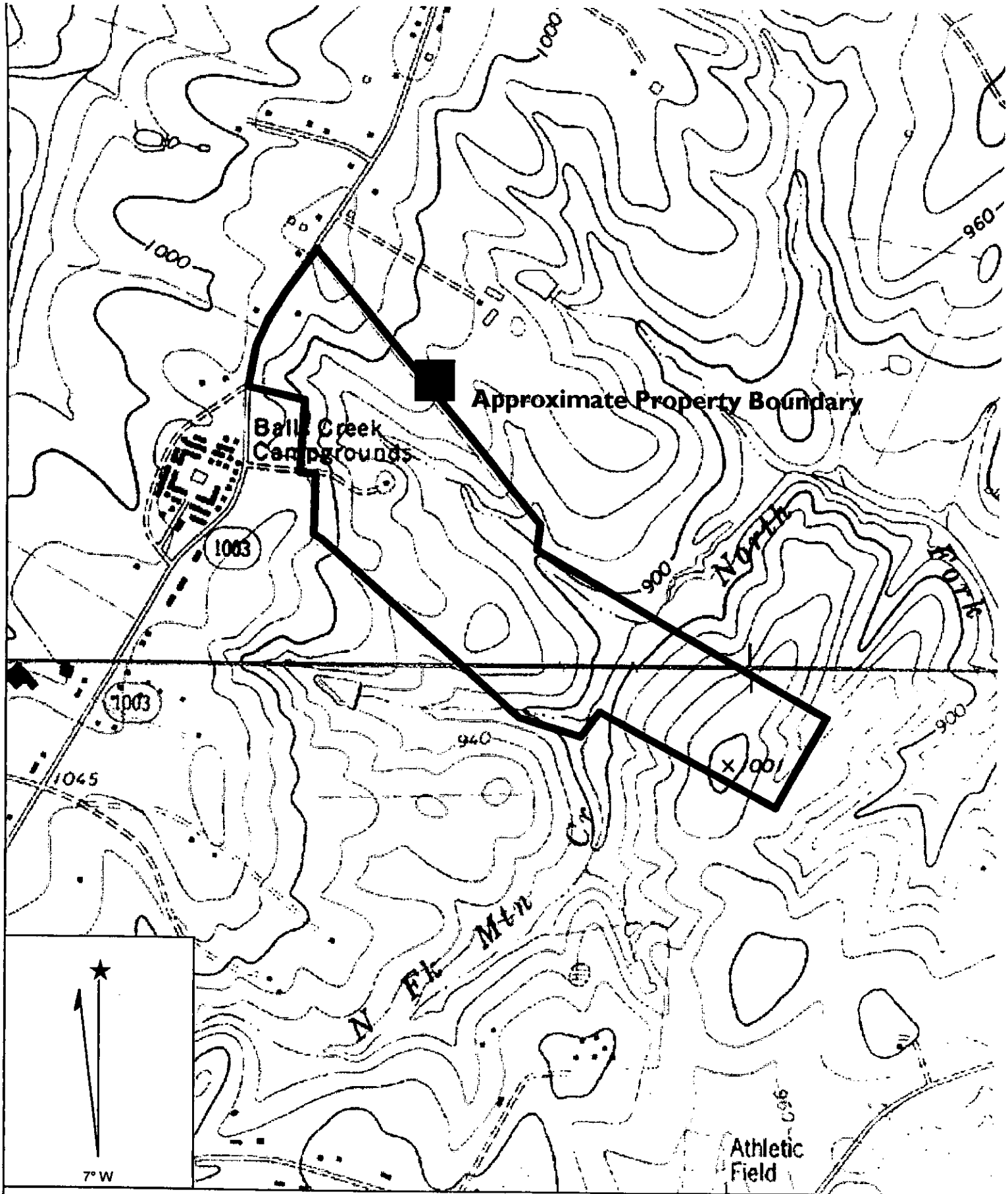
Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, May 13, 2005. Comments should be submitted to Ms. Amanda Jones, 151 Patton Avenue, Room 208, Asheville, North Carolina 28801-5006.



Name: CATAWBA
Date: 3/24/2005
Scale: 1 inch equals 4000 feet

Location: 035° 37' 35.46" N 081° 05' 23.73" W
Caption: MacLeod Lake Project
Buffalo Shoals Road
WNR, Inc. Job # MEC-1001

Figure 1



Name: CATAWBA
Date: 3/24/2005
Scale: 1 inch equals 1000 feet

Location: 035° 37' 35.46" N 081° 05' 23.73" W
Caption: MacLeod Lake Project
Buffalo Shoals Road
WNR, Inc. Job # MEC-1001

Figure 2

MACLEOD LAKE PROJECT

Catawba County Aerial Map

Buffalo Shoals Road

WNR

MAP NOT TO SCALE

Figure 3

MacLeod Investments, LLC
Lake Project
Catawba County Soil Survey Sheet 35

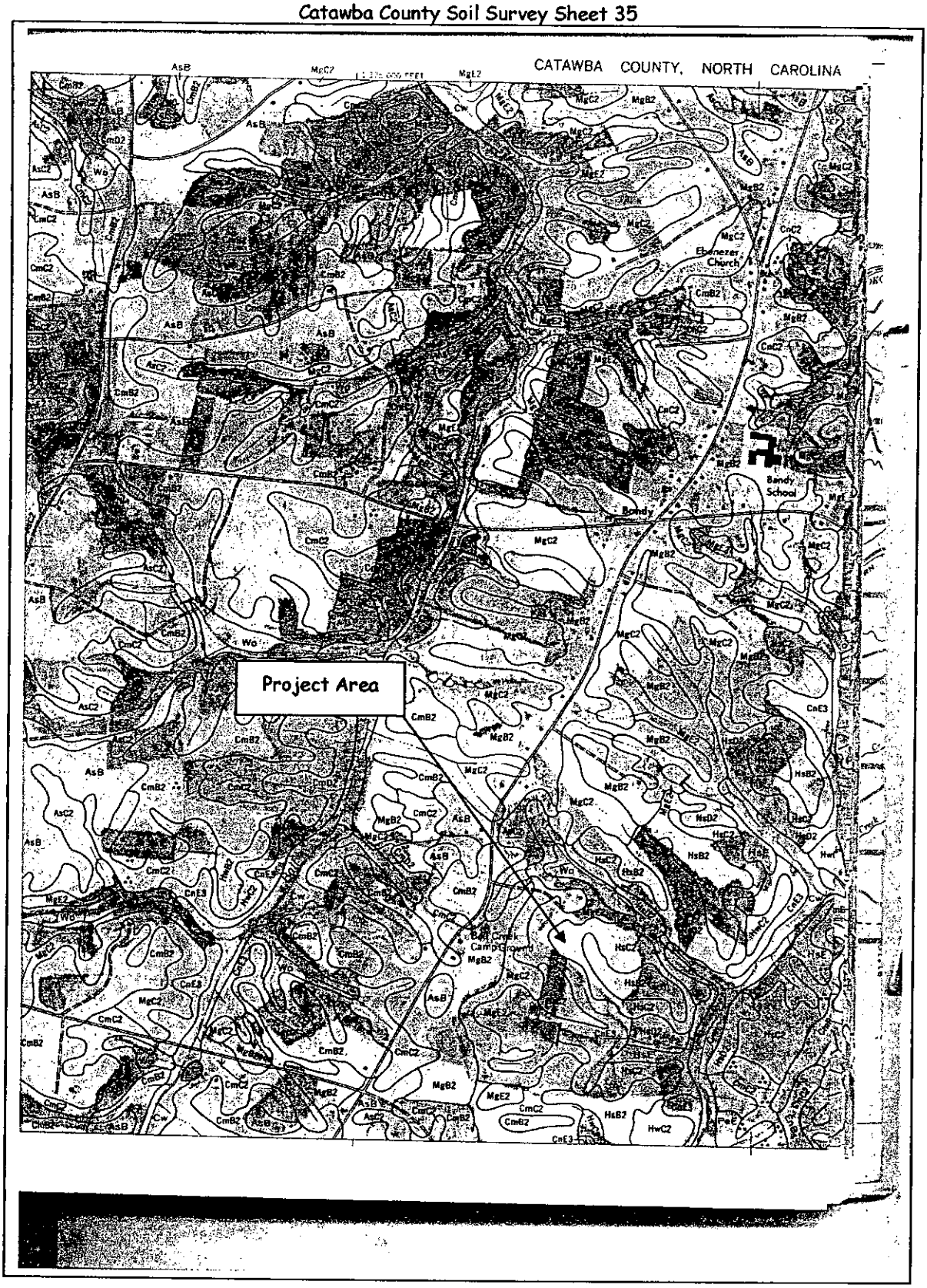
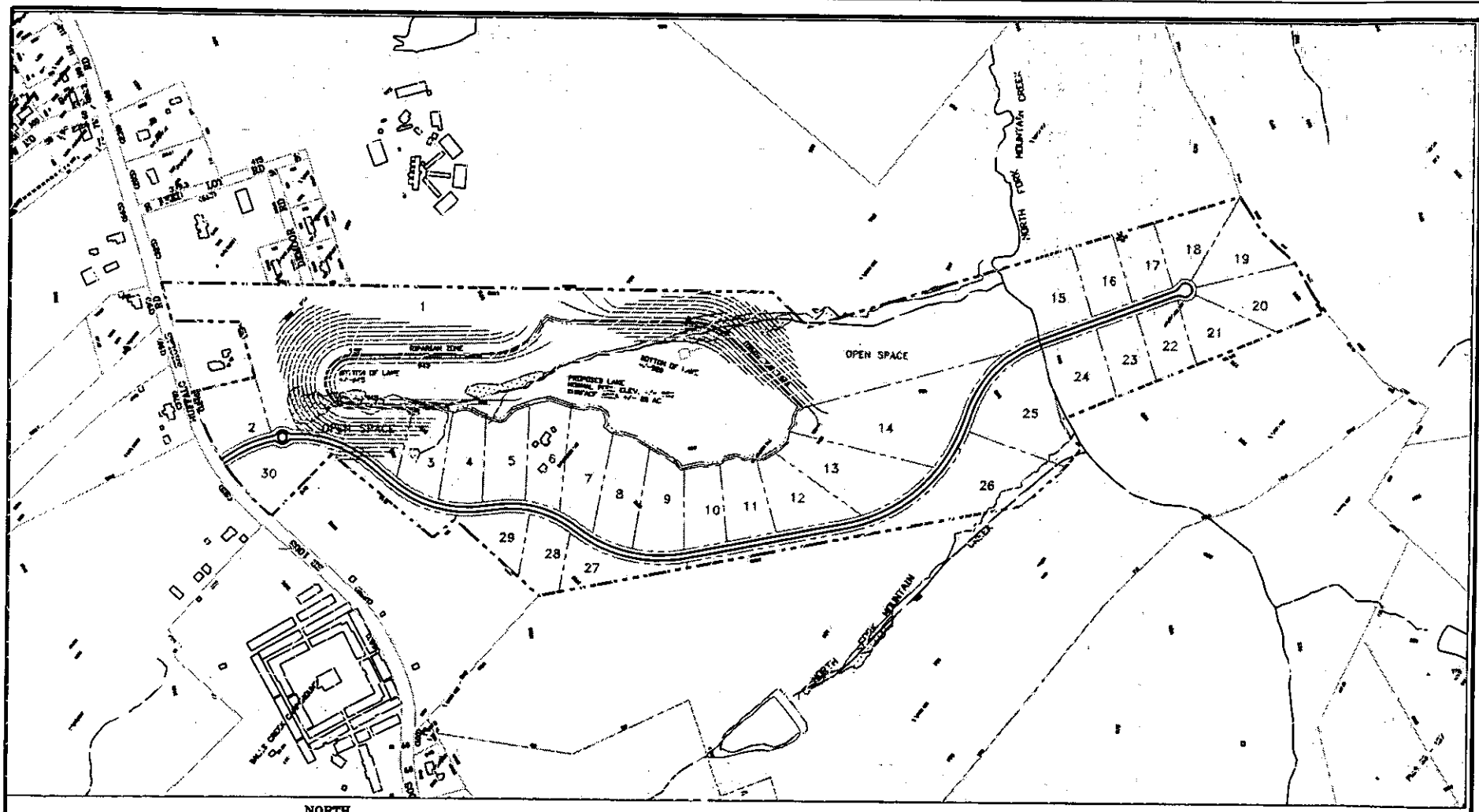


Figure 4


OPEN SPACE
OPEN SPACE
NORTH FORK MOUNTAIN CREEK
NORTH FORK MOUNTAIN
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
NORTH
GRAPHIC SCALE
(IN FEET)
1 inch = 200 ft.
MANSOUR
EDLIN
CONSULTING
LAND PLANNING
CIVIL ENGINEERING
SITE DEVELOPMENT DATA:
PARCEL # 367802899458
TOTAL AREA: ±120 AC
NUMBER OF LOTS: 30
AVG. LOT SIZE: 2 AC
R & L MacLeod Investments
P.O. BOX 320
DENVER, NC 28036
PHONE: 704-483-3580
BUFFALO SHOALS LAKE
CATAWBA COUNTY
NORTH CAROLINA

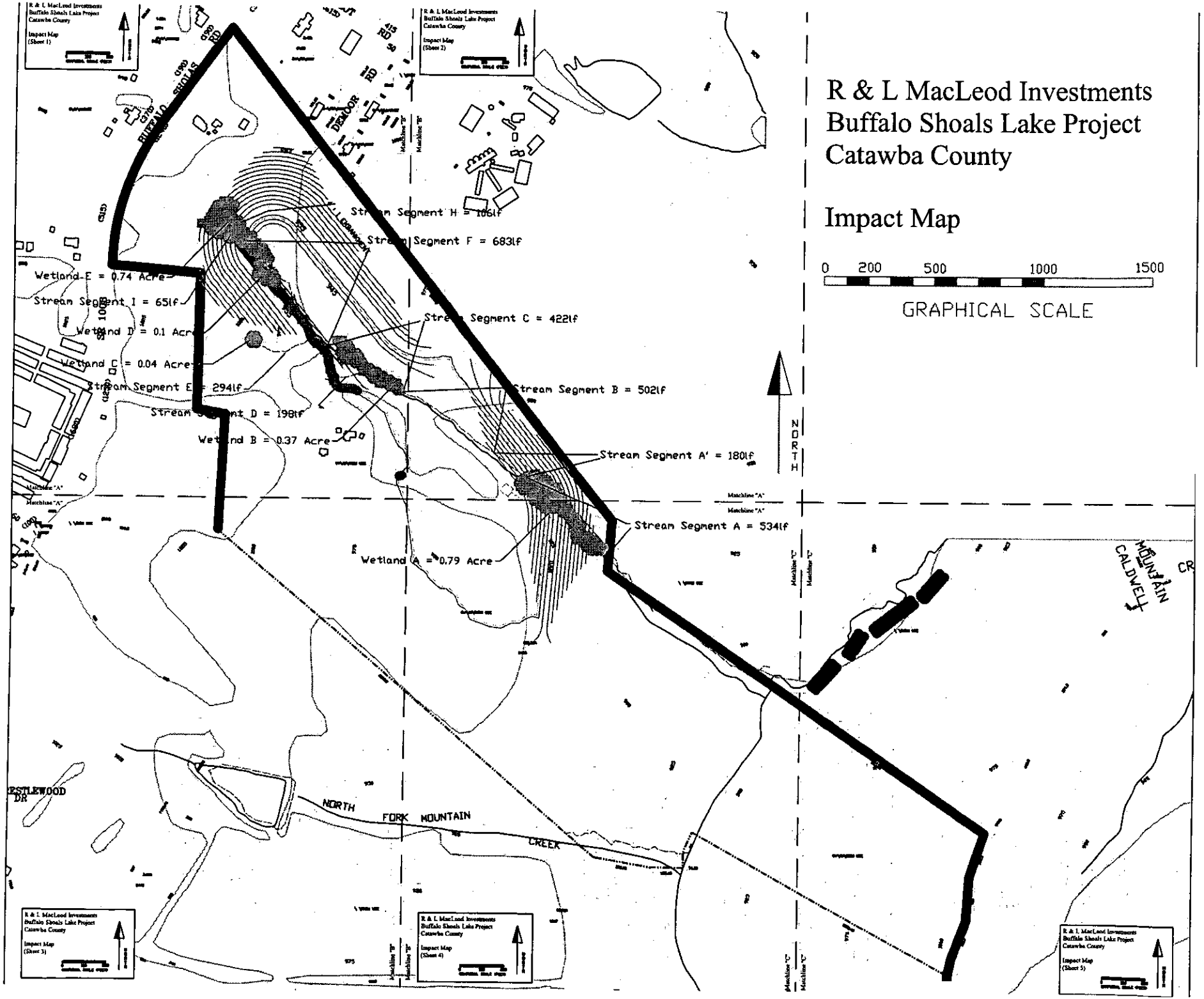

R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Impact Map
0 200 500 1000 1500
GRAPHICAL SCALE
Stream Segment H = 106lf
Stream Segment F = 683lf
Wetland E = 0.74 Acre
Stream Segment I = 65lf
Wetland D = 0.1 Acre
Wetland C = 0.04 Acre
Stream Segment E = 294lf
Stream Segment D = 198lf
Wetland B = 0.37 Acre
Stream Segment C = 422lf
Stream Segment B = 502lf
Stream Segment A' = 180lf
Stream Segment A = 534lf
Wetland A = 0.79 Acre
NORTH
NORTH FORK MOUNTAIN CREEK
MOUNTAIN CALDWELL CR
ESTLEWOOD DR

Figure 6

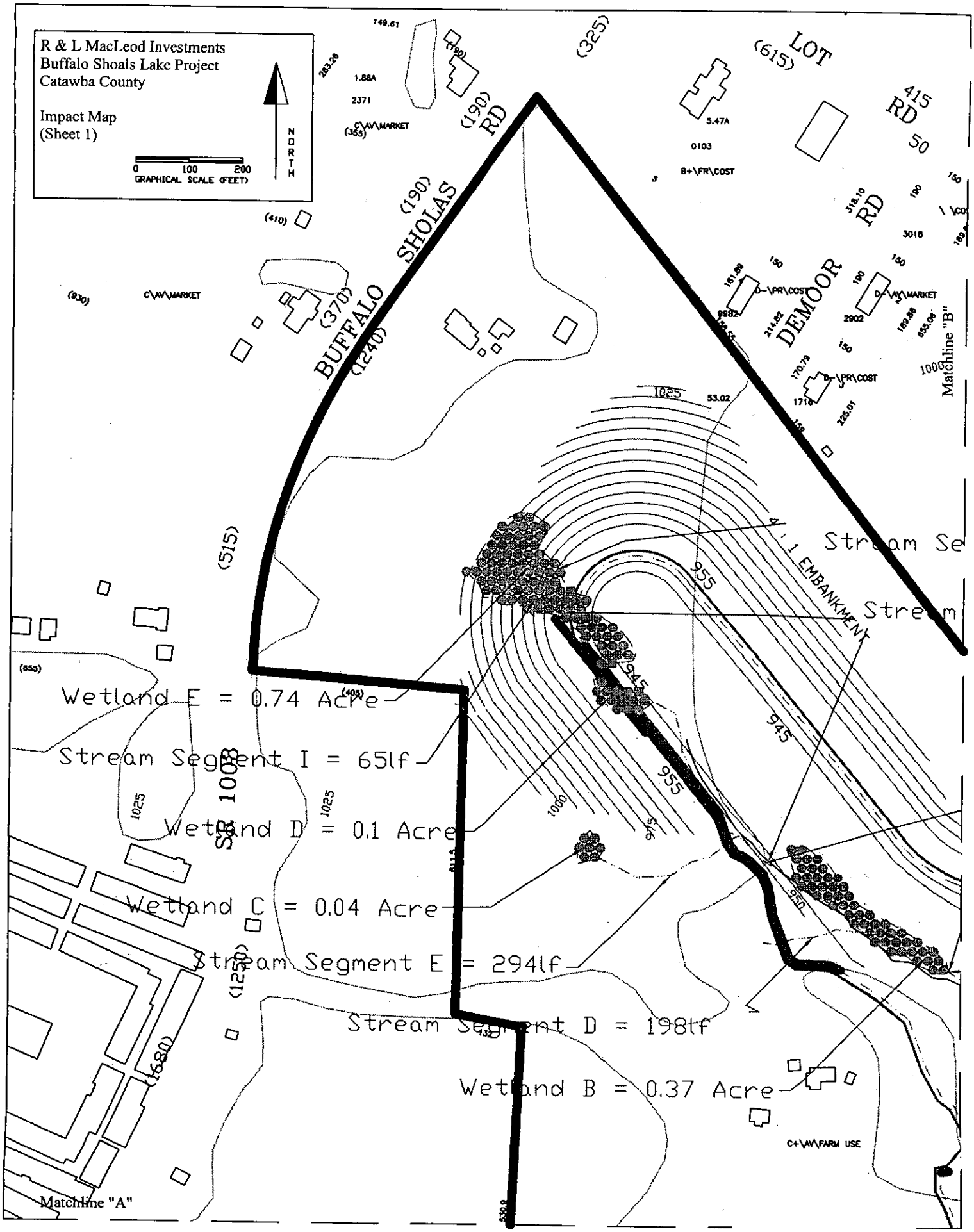

R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Impact Map
(Sheet 1)
0 100 200
GRAPHICAL SCALE (FEET)
NORTH
BUFFALO SHOLAS RD
DEMOOR RD
LOT
Matchline "A"
Matchline "B"
Wetland E = 0.74 Acre
Stream Segment I = 65lf
Wetland D = 0.1 Acre
Wetland C = 0.04 Acre
Stream Segment E = 294lf
Stream Segment D = 198lf
Wetland B = 0.37 Acre
4:1 EMBANKMENT
SB 1008

Figure 7

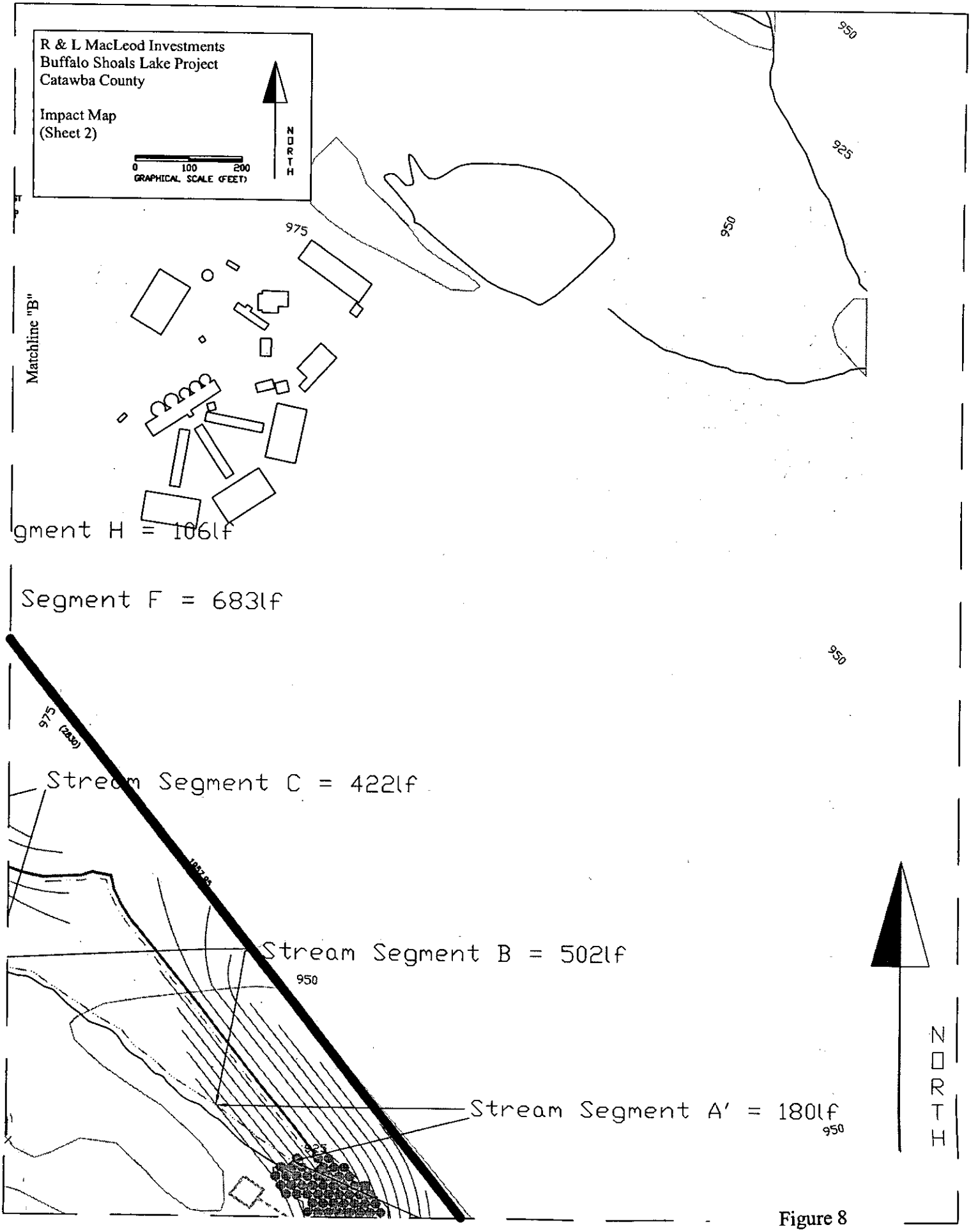
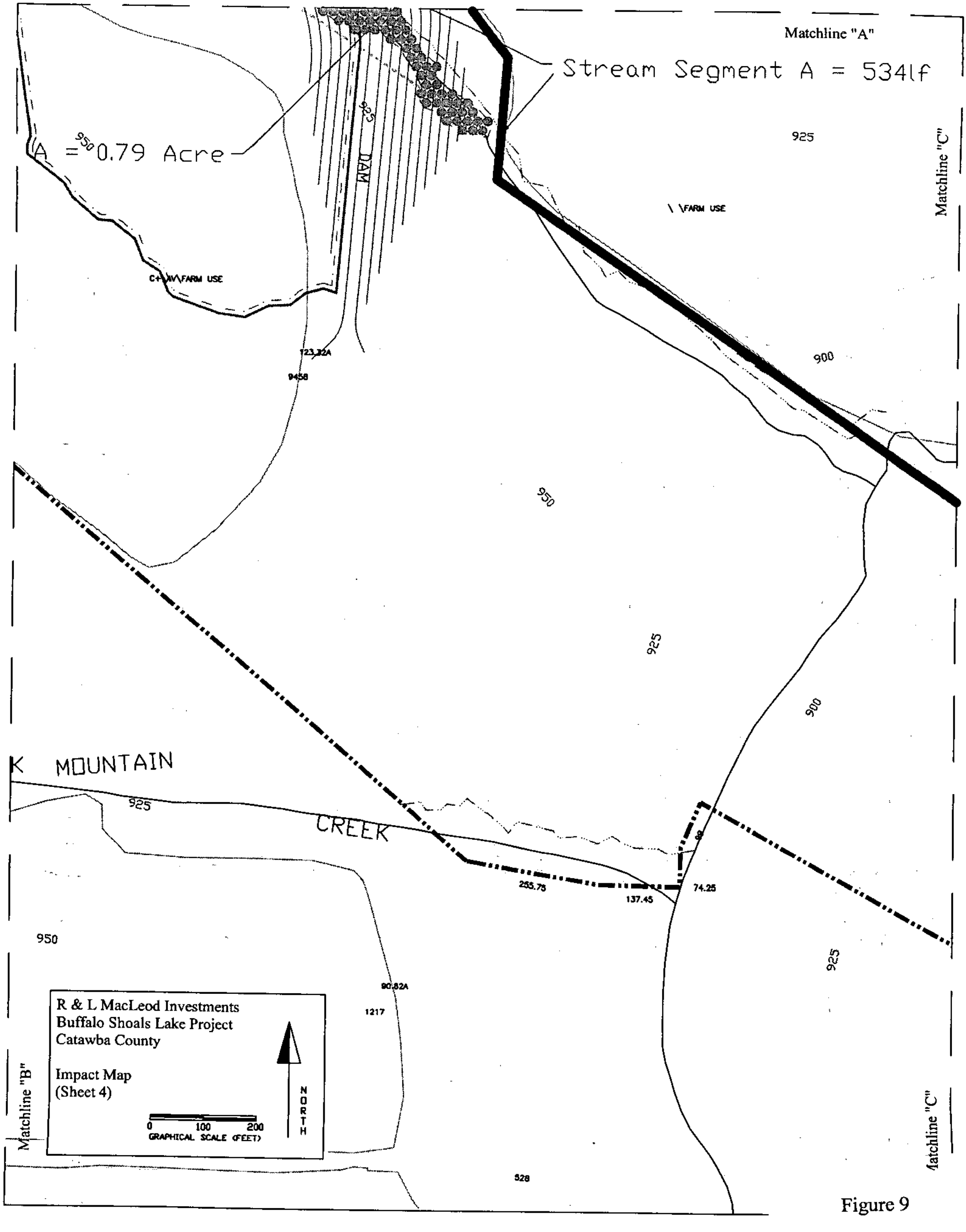

R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Impact Map
(Sheet 2)
0 100 200
GRAPHICAL SCALE (FEET)
NORTH
950
925
975
950
Matchline "B"
gment H = 106lf
Segment F = 683lf
950
975 (2&3)
Stream Segment C = 422lf
Stream Segment B = 502lf
950
Stream Segment A' = 180lf
950
925
NORTH

Figure 8



Matchline "A"
Stream Segment A = 534lf
A = 0.79 Acre
925
DAM
950
925
Matchline "C"
\ \FARM USE
C+AV\FARM USE
123.32A
9458
900
950
925
900
K MOUNTAIN
925
CREEK
255.75
137.45
74.25
950
925
90.82A
1217
R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Impact Map
(Sheet 4)
0 100 200
GRAPHICAL SCALE (FEET)
NORTH
Matchline "B"
Matchline "C"
528

Figure 9

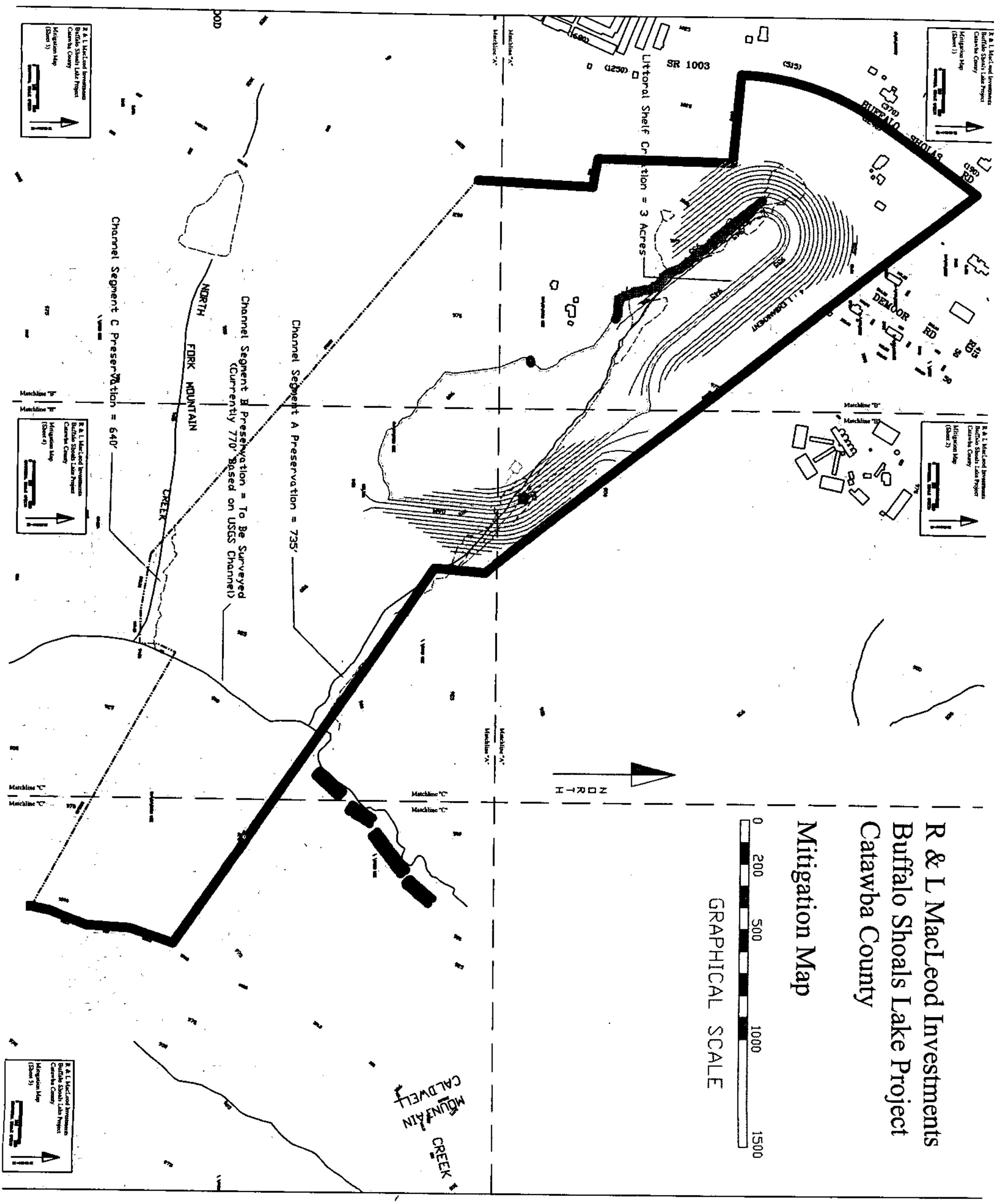

R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Mitigation Map
0
200
500
1000
1500
GRAPHICAL SCALE
NORTH
Littoral Shelf Creation = 3 Acres
Channel Segment A Preservation = 735'
Channel Segment B Preservation = To Be Surveyed
(Currently 770' Based on USGS Channel)
Channel Segment C Preservation = 640'
NORTH FORK MOUNTAIN CREEK
CALDWELL MOUNTAIN CREEK
SR 1003
BUFFALO SHOALS RD
DEMOOR RD
Matchline "A"
Matchline "B"
Matchline "C"

Figure 10

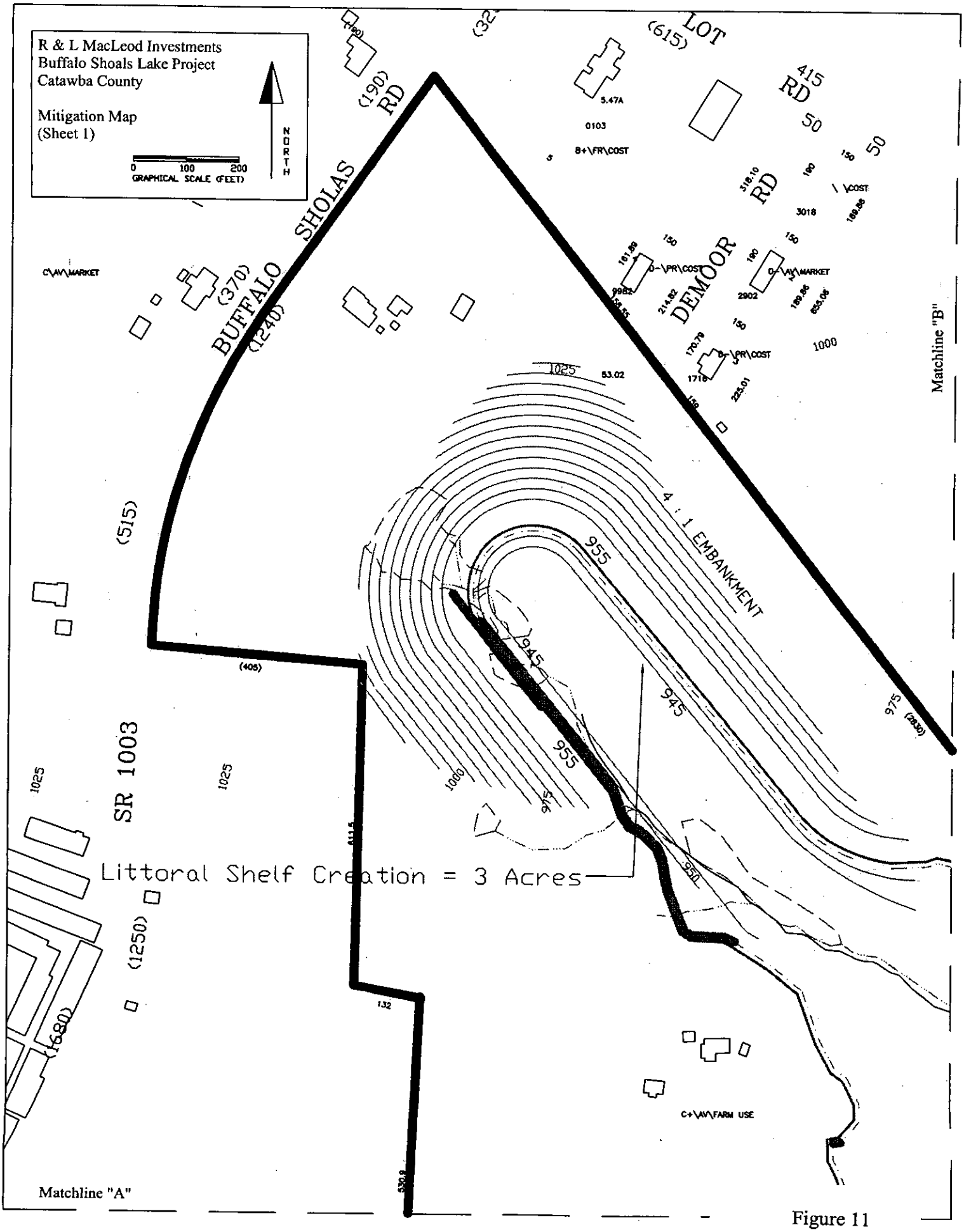

R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Mitigation Map
(Sheet 1)
0 100 200
GRAPHICAL SCALE (FEET)
NORTH
BUFFALO SHOALS RD
DEMOOR RD
LOT
SR 1003
4 : 1 EMBANKMENT
Littoral Shelf Creation = 3 Acres
Matchline "A"
Matchline "B"
1025
955
945
975
1000
950

Figure 11

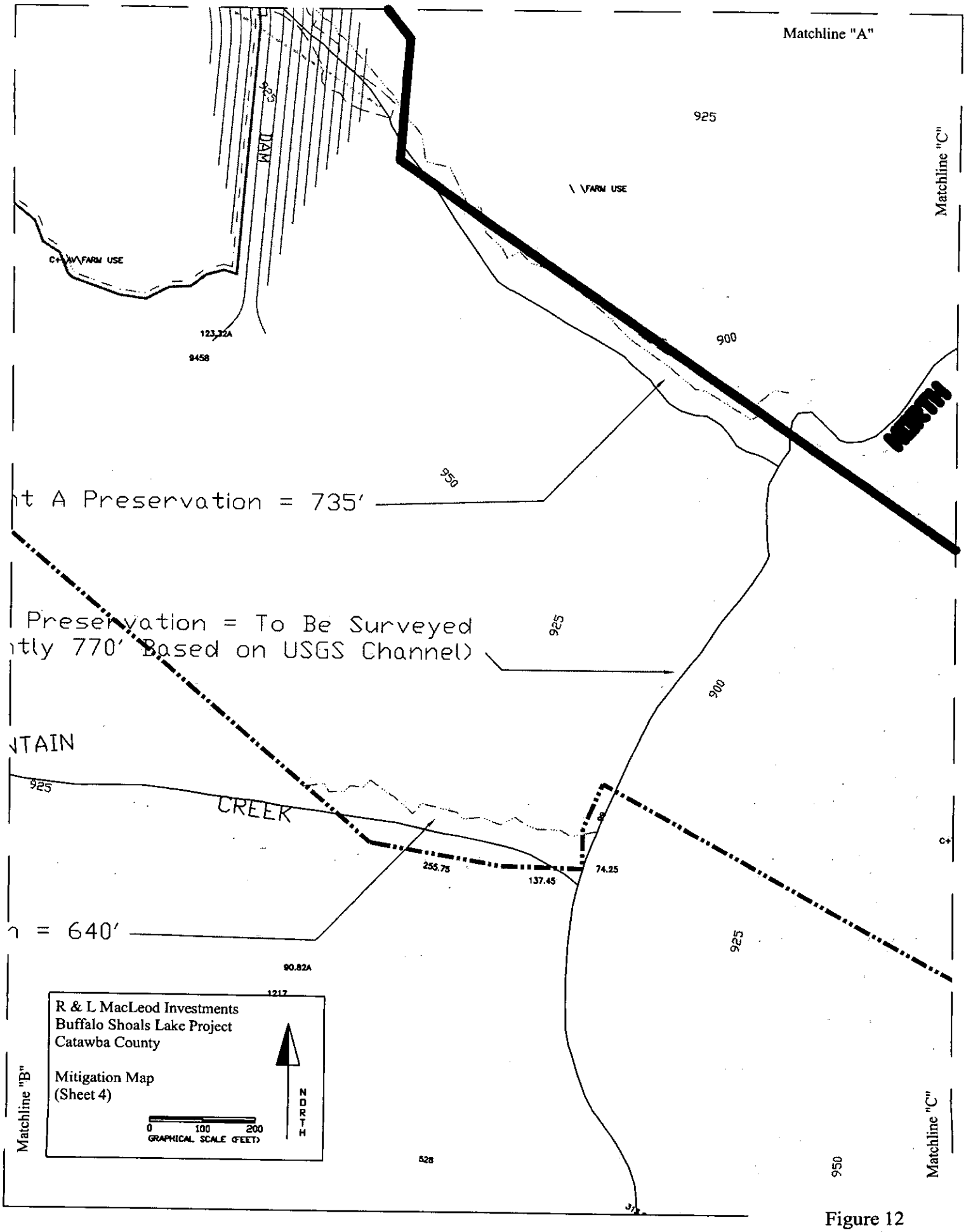
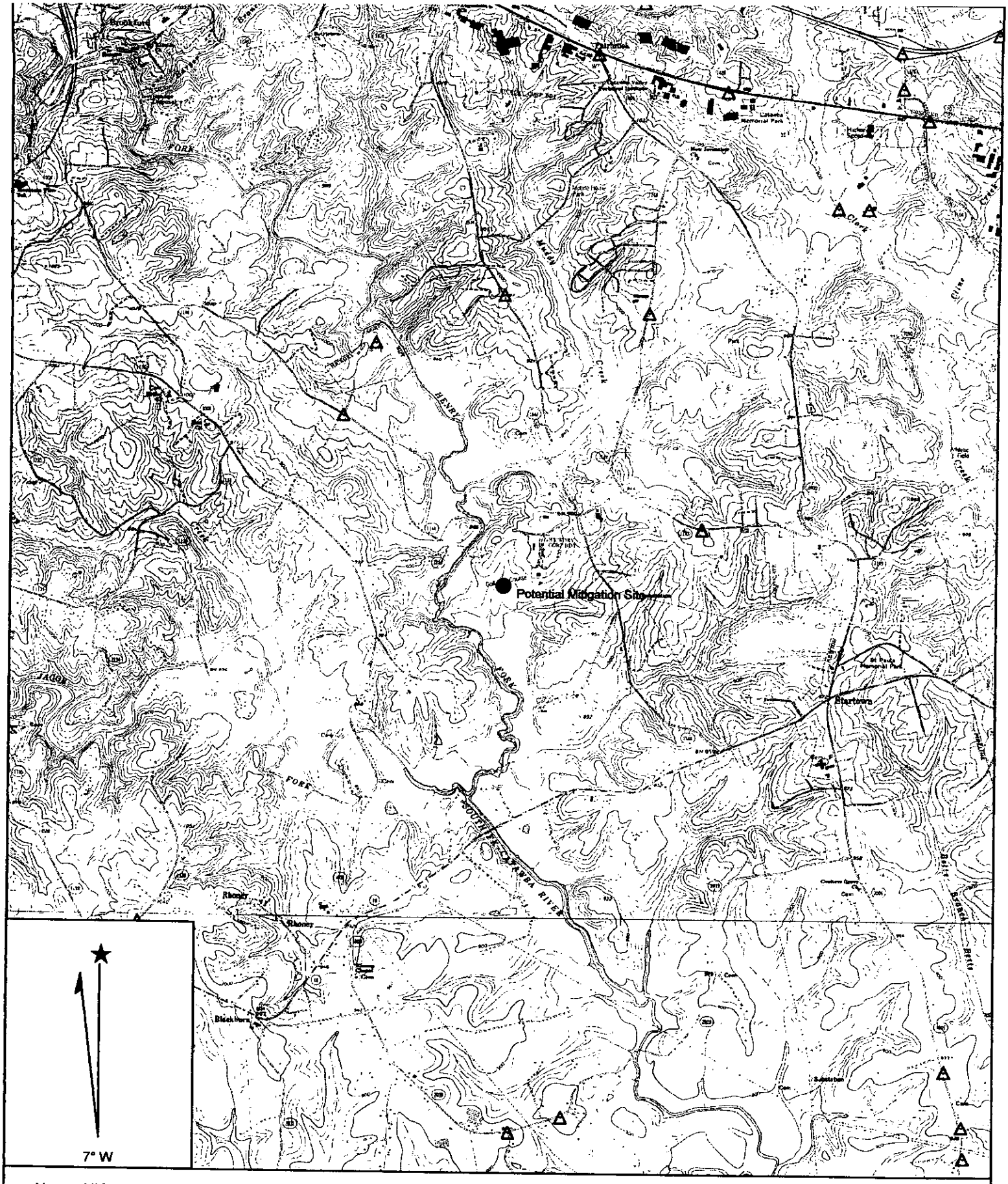

Matchline "A"
925
DAM
FARM USE
123.32A
9458
900
950
t A Preservation = 735'
Preservation = To Be Surveyed
tly 770' Based on USGS Channel)
925
900
NTAIN
925
CREEK
255.75
137.45
74.25
= 640'
925
90.82A
1217
528
950
Matchline "B"
Matchline "C"
Matchline "C"
R & L MacLeod Investments
Buffalo Shoals Lake Project
Catawba County
Mitigation Map
(Sheet 4)
0 100 200
GRAPHICAL SCALE (FEET)
NORTH

Figure 12



Name: HICKORY
Date: 3/28/2005
Scale: 1 inch equals 4000 feet

Location: 035° 39' 16.75" N 081° 18' 17.57" W
Caption: MacLeod Lake Project
Potential Mitigation Site
Catawba Country Club

Figure 13

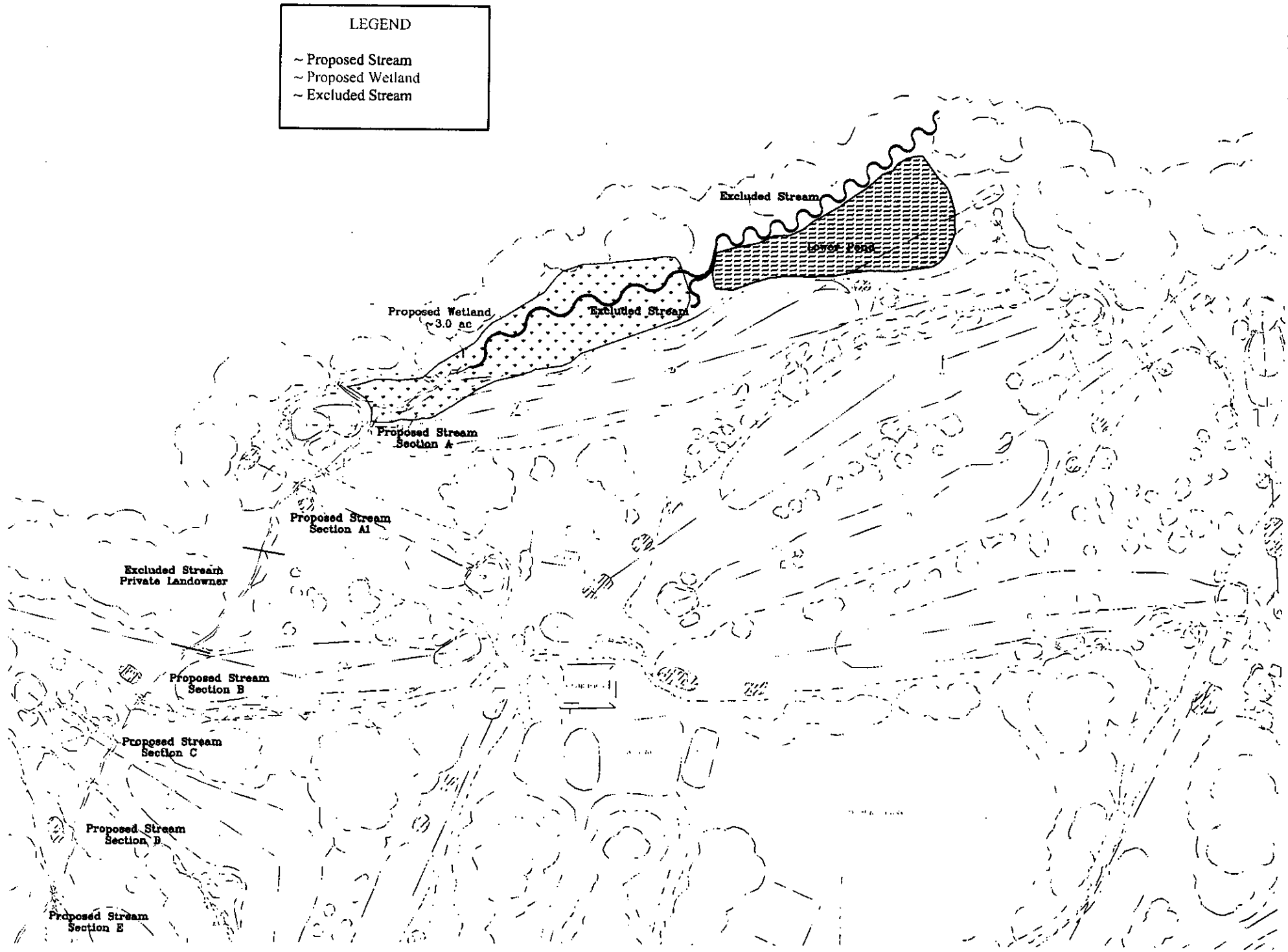

LEGEND
~ Proposed Stream
~ Proposed Wetland
~ Excluded Stream
Excluded Stream
Lower Pond
Proposed Wetland
3.0 ac
Excluded Stream
Proposed Stream
Section A
Proposed Stream
Section A1
Excluded Stream
Private Landowner
Proposed Stream
Section B
Proposed Stream
Section C
Proposed Stream
Section D
Proposed Stream
Section E

Figure 14